

Message

From: Strynar, Mark [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=5A9910D5B38E471497BD875FD329A20A-STRYNAR, MARK]
Sent: 11/22/2017 2:09:12 PM
To: Xenia Trier [Xenia.Trier@eea.europa.eu]
CC: FNielsen@health.sdu.dk
Subject: RE: Standard for Nafion?
Attachments: Nafion synthesis scheme.pptx

Hi Xenia,

Due to an issue we have here in North Carolina <https://deq.nc.gov/news/hot-topics/genx-investigation> with PFAS being discharged into local water the chemical company Chemours (formerly Dupont) synthesized two Nafion byproducts for me to do some analysis in local water (see attached PPT slides). It is not actually Nafion which is a polyfluorinated sulfonated co-polymer, they are byproducts of manufacture. I received 80-100 mg total of each for this effort just before SETAC last week. We are calling them Nafion BP1 and BP2. I have not yet been able to dissolve these standards and analyze for purity as of yet for my own purposes. I am told one is >95% pure and the other ~80% pure by the producer. Once I have dissolved the chemical and assessed it myself I will be willing to share a stock solution in methanol with Flemming, however I will not have enough to share solid at this time.

I am awaiting a synthesis quote from a US vendor (Synquest) to make a larger quantity for me. However I do not know when that will occur.

Mark

From: Xenia Trier [mailto:Xenia.Trier@eea.europa.eu]
Sent: Wednesday, November 22, 2017 4:48 AM
To: Strynar, Mark <Strynar.Mark@epa.gov>
Cc: Lau, Chris <Lau.Christopher@epa.gov>
Subject: RE: Standard for Nafion?

Dear Mark

Chris kindly forwarded my request for some Nafion standard. It is for Flemming Nielsen at the lab at Southern Danish University, who are those analysing the studies of Philippe Grandjean, and who also are doing PFAS analyses for the HBM4EU (EU version of NHANES). Since they have got a new MS instrument they are soon ready to re-validate the method, and would like to include new PFASs such as GenX, Adona and Nafion. However, Nafion is not yet commercially available, but at the PFAS meeting in Zürich I heard that someone has some standard – and it turns out to be you!

Flemming would be happy to get 50-100 mg, and to know more about the purity and guidance for dissolving it I suppose ☺ Suggestions for which internal standard that works, ionisation voltage, mass transitions (precursor/product ion), elution order etc. would be appreciated. I forget if you have published an article yet, but in any case I suppose Flemming would acknowledge you/refer to you as you prefer – and he would be very grateful too ☺ Flemming is a good analytical chemist and a good guy.. and getting the new PFAS into his blood method is really relevant since they do a lot of the European blood measurements.

His contact details are: Flemming Nielsen FNielsen@health.sdu.dk

If you have any questions or hesitations, please let me know. If you prefer to send the standards to an authority, just let me know.

KR Xenia

From: Lau, Chris [<mailto:Lau.Christopher@epa.gov>]
Sent: 21 November 2017 20:21
To: Xenia Trier <Xenia.Trier@eea.europa.eu>
Cc: Strynar, Mark <Strynar.Mark@epa.gov>
Subject: RE: Standard for Nafion?

Xenia:

I just spoke to Mark, and he may have access to some Nafion. I would suggest for you to contact him directly (see his address copied) to get the full scoop, rather than hearing from me second-handedly.

Let me know if there is anything else I can be of assistance, and keep me in the loop.

Chris

From: Xenia Trier [<mailto:Xenia.Trier@eea.europa.eu>]
Sent: Tuesday, November 21, 2017 12:17 PM
To: Lau, Chris <Lau.Christopher@epa.gov>
Cc: Flemming Nielsen <FNielsen@health.sdu.dk>
Subject: Standard for Nafion?

Dear Chris

It was so nice to see you again, and good to know that you still keep active in the PFAS toxicology field, which finally is getting some attention in the US again.

You said that you were interested in getting some studies done on rats/mice in Denmark for Nafion, and I could contact my former colleague Ulla Hass to propose it to her. However... for that we need the chemical! Someone (you?) said that you had a standard that you could send...?? I would also kindly ask for some 50-100 mg of the standard, to give to Flemming Nielsen, the master analytical expert at the Southern Danish University which makes all the PFAS analyses for Philippe Grandjean. He would be interested in including it into the method which is used for the Human Biomonitoring for Europe (HBM4EU) project similar to the NHANES... If he could have it in about 1 months time it would be super, because at that time he will start to validate the PFAS method on a new MS-instrument.

Please let me know if you need anything else, and my warm greetings to the US, and all you US EPA people.. Hang in there, we need you!

KR Xenia

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